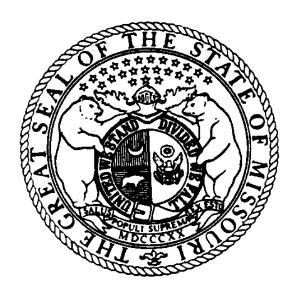
REPORT

OF THE

SENATE INTERIM COMMITTEE

 \mathbf{ON}

PANDEMIC PREPAREDNESS



January 26, 2007

Prepared by Chris Hogerty, Senate Research

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January 26, 2007

The Honorable Michael Gibbons, President Pro Tem State Capitol, RM 326 Jefferson City, MO 65101

Dear Mr. President:

The Senate Interim Committee on Pandemic Preparedness, acting pursuant to Senate Rule 31, has met, taken testimony, deliberated, and concluded its study of the state's disaster preparedness in the wake of a flu pandemic. The undersigned members of the committee are pleased to submit the attached report.

Senator Robert Mayer, Chair
Senator Dan Clemens
Senator Bill Stouffer
Senator Frank Barnitz
Senator Victor Callahan

Senate Interim Committee on Pandemic Preparedness

I. OVERVIEW

Recognizing the need for continued study to determine the state's preparedness and the need for coordinated response plans across all levels of government in the wake of an influenza pandemic, President Pro-Tem, Senator Gibbons, established the Senate Interim Committee on Pandemic Preparedness. The committee was charged primarily with studying infrastructure adequacies, interagency cooperation, and coordinated response plans necessary to adequately respond to a pandemic emergency. The members of the committee consisted of the following Senate members: Senator Robert Mayer, Chair; Senator Frank Barnitz; Senator Victor Callahan; Senator Dan Clemens; and Senator Bill Stouffer.

The committee held public hearings and solicited testimony regarding a wide range of issues related to the state's ability to respond to a pandemic emergency. Hearings were held in the following locations:

September 13, 2006	Jefferson City, MO
October 19, 2006	Jefferson City, MO
November 9, 2006	Jefferson City, MO

Based on written and oral testimony provided by the Department of Health and Senior Services, the Missouri Hospital Association, the Institute for Biosecurity, the directors and administrators of local health departments, and other interested persons, the committee has compiled findings and recommendations intended to explain the state's current state of readiness to respond to a pandemic flu outbreak and provide strategies to further prepare the state in case of such a potential disaster. Based on the testimony, the committee offers the following findings and recommendations.

II. BACKGROUND

According to the World Health Organization, an influenza pandemic occurs when a new flu virus emerges to which humans have no immunity, resulting in several simultaneous outbreaks worldwide that cause massive death tolls and widespread illnesses. Seasonal outbreaks occur when the surface proteins of a virus undergo minor changes that allows the virus to escape the immunity that humans have developed due to previous infections or in response to vaccinations. When a major change occurs spontaneously in one of the surface proteins of the virus, no human will have even partial immunity which will cause a potentially deadly pandemic if the virus can be spread from person to person.

Perhaps the most memorable and certainly one of the most deadly outbreaks in recent history occurred in 1918. Better known as the "Spanish Flu", the H1N1 virus emerged and claimed the lives of 500,000 people in the United States and between 20 million to 50 million people worldwide.⁴ Experts predict that due to fewer impediments to global travel and the overwhelming strain that will be placed on medical facilities, the next pandemic virus could spread rapidly leaving little time for preparation and ultimately result in between 2 to 7.4 million deaths around the world.⁵ Experts say that since pandemics tend to occur in cycles and the world has not experienced one in many years, it is statistically probable that a pandemic outbreak will occur in the near future.⁶

Many of the recent outbreaks causing concern among disease specialists around the world are avian influenza A (or H5N1) viruses which are not currently pandemic but could change into the type of virus that can cause a human pandemic.⁷ These types of strains are not currently causing sustained human-to-human transmission but are instead thought to have

2 *Id*.

3 *Id*.

¹ World Health Organization. http://www.who.int/csr/disease/influenza/pandemic/en/print.html. (Last visited 1/23/07).

⁴ National Institute of Allergy and Infectious diseases. http://www3.niaid.nih.gov/news/focuson/flu/illustrations/timeline/htm (Last visited 1/23/07).

⁵ Supra, n. 1.

⁶ Department of Health and Senior Services, *Preparing for Pandemic Flu: A Community Guide*. www.dhss.mo.gov/Ready in 3/PanFluCommunityGuide.pdf

⁷ The Department of Health and Human Services Centers for Disease Control and Prevention cite 11 confirmed instances of avian flu outbreak found in human beings since 1997. More than 200 confirmed cases of avian influenza A infecting humans have been found since 2004.

resulted from direct contact with infected poultry. Nonetheless, specialists are watching these and other strains closely in order to be able to quickly discover a change in any virus that could lead to a possible pandemic.⁸

Due to the seriousness of a possible outbreak, the federal government has been increasing efforts to coordinate strategies for quick and effective response, and provide public health information to educate the public and guide state and local governments regarding preparation strategies in the event of an outbreak.

Wildlife disease biologists, veterinarians, and epidemiologists in the United States have banded together to provide a national system for monitoring viruses in wild migratory birds by providing standards and procedures for sampling, diagnostics, and management to be used as guidelines for other groups and agencies involved in avian monitoring. This group has developed a United States Interagency Strategic Plan to create a national system for early detection of highly pathenogenic avian influenza viruses in migratory birds. The plan geographically prioritizes sampling efforts based on particular flyways that will be most likely to carry high risk birds.

On November 1, 2005, the White House issued the National Strategic Plan for Pandemic Influenza designed to guide the nation in preparation for a pandemic. The plan was created to give federal interagency guidance to minimize the effects of an outbreak and establish domestic vaccine and antiviral medication production and stockpile capacity. As a result of the issuance of the plan the Department of Homeland Security developed the Pandemic Influenza Preparedness, Response, and Recovery Guide for Critical Infrastructure and Key Resources to urge and help all types of business and industry in general, to integrate pandemic response procedures within their contingency plans to enhance traditional notions of continuity of operations, which constitute the outer limits of most plans. Similarly, the U.S. Department of Health and Human Services issued the HHS Pandemic Influenza Plan in November 2005 to provide guidance for state and local governments. The plan includes guidance on the topics of

11 Id.

12 See, The National Strategy for Pandemic Influenza, www.whitehouse.gov/homeland/nspi.pdf

- 13 Department of Homeland Security, www.pandemicflu.gov/plan/pdf/CIKRpandemicInfluenzaGuide.pdf
- $14\ \textit{Department of Health and Human Services}, \\ www.hhs.gov/pandemicflu/plan/pdf/HHSPandemicInfluenzaPlan.pdf$

⁸ *Supra*, n. 1. The World Health Organization list the current state of pandemic alert at stage 3which is puts the world on an alert status but with no or very limited human-to-human transmissions.

⁹ U.S. Department of Health and Human Services, www.pandemicflu.gov/outbreaks/index.html

¹⁰ Id. at www.pandemicflu.gov/issues/screening.html

surveillance of viruses, laboratory diagnostics, healthcare planning, infection control, clinical guidelines, vaccine distribution, antiviral drug distribution, community disease control and prevention, managing travel-related risks, public health communications, and psychosocial workforce support.¹⁵ The Center for Disease Control, under the Department of Health and Human Services, provides a tool kit to be used by clinicians in the event of a pandemic.¹⁶ In addition to this guidance, the CDC through Executive Order 13295 has the authority to order quarantines for those infected by influenza.¹⁷ Although the CDC retains this power, they generally defer to state and local health department decisions involving this type of action.¹⁸

Although the federal government has made efforts to educate and guide state and local governments with respect to pandemic preparation, the onus of choreographing an efficient response mainly falls to the cooperation efforts developed by the state and local governments and the agencies that will be called upon to perform when a pandemic arises. The following testimony gathered by the committee outlines the state and local efforts undertaken to protect Missourians in the event of a pandemic, the state's level of preparedness, and various other concerns regarding an outbreak.

15 *Id*.

¹⁶ Center for Disease Control, http://www.cdc.gov/flu/pandemic/healthprofessional.htm#quarantine

¹⁷ This order was issued April 4, 2003 and added influenza to the list of diseases for which the CDC, under the authority given to the Department of Health and Human Services pursuant to 42 USC 264 and 42 CFR 70 and 71 has the power to detain, medically examine, or release individuals infected with one of the enumerated diseases.

¹⁸ See, http://www.cdc.gov/ncidod/dq/qa_influenza_amendment_to_eo_13295.htm

III. SUMMARY OF INFORMATION AND TESTIMONY RECEIVED

Over the course of three public hearings, the committee gathered a tremendous amount of information about the state's readiness to react to a pandemic outbreak. As could be expected, the committee heard from a variety of witnesses including the Department of Health and Senior Services; administrators of local health departments; the Missouri Hospital Association; the Director of Agriculture; and the Institute for Biosecurity, St. Louis University School for Public Health. The committee actively sought out witnesses who could convey their professional knowledge about the state's preparedness and suggest legislative strategies to bolster the state's ability to achieve they type of interstate and intrastate cooperation necessary to provide adequate support for Missouri citizens in the event of a pandemic.

Testimony taken on September 13, 2006, Jefferson City Missouri

The committee began its inquiry by hearing testimony from the Director of the Department of Health and Senior Services, Julie Eckstein. Director Eckstein began her testimony by summarizing the differences between seasonal flu and a pandemic outbreak by focusing on the enormity of scale with regard to a pandemic and its potentially devastating impact on humans and services. According to Director Eckstein, 1/3 of the world's population could become ill, many more would be needed for in-home care for those who are ill, hospitals would become overwhelmed by the huge influx of patients, and supply chains could be reduced leading to shortages of food, medicine, and other essentials. Medical, transportation, school, utility and law enforcement services, she contended, are just a few areas that could be significantly compromised in the event of a pandemic.

When asked how the Department of Health and Senior Services is preparing for a potential outbreak, Director Eckstein stated that the department was actively engaged in projects with the local, state, and federal governments and even some non-governmental entities to provide coordinated pandemic plans. Accordingly, the department is working with 114 local health agencies around the state run by counties and local health boards to develop and update statewide and local pandemic plans; organize cooperation efforts involving essential community services, groups, and local officials; and test plans through coordinated exercises. Bruce Clements also of the department, joined with Director Eckstein's testimony and added that the department is currently working with the Homeland Security Advisory Council and have subcommittees on the state and local levels to coordinate pandemic relief. Descriptions of the subcommittees and sub-committee membership were provided to the committee and included special health care needs, continuity of business, zoonotic influenza, mortuary affairs, and mental health with members affiliated with many organizations including hospitals, medical examiners, local and state health departments, the Red Cross, the state public health laboratory, banks and law firms.

The two members of the department further testified that the department was working with the federal government to stockpile medications and supplies, research new vaccines, monitor and develop quick response to virus outbreaks, help the state and localities develop response plans, and establish public health guidelines. They further testified to working with the

Center for Disease Control by currently testing pilot projects designed to gauge the effectiveness of placing vaccines and pandemic kits in the homes of Missouri residents.

In closing, the two members of the department urged the committee to recommend legislation supporting a waiver of liability for medical professionals from other states who are deployed in the case of an emergency such as a pandemic.

Eddie Hedrick, an Infectious Control Epidemiologist testified to the lack of availability of a vaccine for a potential outbreak and asserted that it could take months after an outbreak to develop a viable vaccine, have it manufactured, and get it distributed.

Jodi Waltman of the Missouri Association of Local Public Health Agencies testified to her organizations cooperation with the Department of Health and Senior Services and with neighboring states in order to produce strong mutual aid agreements. She stressed the need for liability protection for volunteer services and the need to update laws to establish a definitive and more comprehensive quarantine authority.

Dennis Diehl of the Jefferson County Health Department (MPHA and MoALPHA) stressed the impending nature of an outbreak and a very delicate balance that needs to be met: that of creating public awarenesss without overstating the case. He added that in order for the state to be prepared on the most basic level, the public needs to have real expectations by being prepared for the realities of a pandemic such as being under quarantine and forgoing public gatherings. He stressed a three-prong approach: 1) communication between governments and agencies; 2) containing the pandemic until vaccines are available through quarantines, school and business closings; 3) the use of the vaccine when available to eradicate the virus. Mr. Diehl concluded his testimony by stressing the need for cross-county mutual aid agreements.

Testimony taken on October 19, 2006, Jefferson City Missouri

Fred Ferrell, the Director of Agrigulture testified in response to the broadening of the committee to incorporate agriterrorism. Mr. Ferrell expressed confidence in the protocols in place to quash a potential contamination of food or water sources in the state. Mr. Ferrell assured the committee that the various divisions and boards who would need to respond to a potential problem have been trained in response avenues to limit damage and quickly pinpoint and eradicate problems. Mr. Ferrell used the quick and successful response to the recent spinach E. coli outbreak as an example of an effective response.

The director explained that there is constant surveillance being conducted across the state to alert the departments of potential problems. Mr. Ferrell offered the Biowatch program as an example whereby air samples are continually monitored for pollutants. Once a problem is detected the sample is tested and if positive a conference call is made with the CDC, FBI, Department of Public Safety and potentially others to plan a strategy to dispose of the problem. According to the director, there are emergency rooms throughout the state that are constantly monitoring these types of problems.

Director of Health and Senior Services, Julie Eckstein, testified once again in front of the committee. Director Eckstein presented a report entitled Situational Report: Avian and Pandemic Influenza to apprise the committee of the state's readiness to react to the next pandemic. According to Director Eckstein, the next pandemic could cause between 5,000 to 10,00 deaths, between 15,000 to 25,000 hospitalizations and between 600,000 and 900,000 instances of outpatient care in Missouri. Director Eckstein highlighted the state's efforts to prepare for this type of devastation and drain on public services including the completion of regional pandemic summits, exercises and drills on quarantine and isolation, and the "Ready in 3" community guide designed to advise citizens on how to prepare for a pandemic. Director Eckstein further testified that although there have been major strides in preparation there will still be significant strains on communities, public health systems, businesses and local governments.

Director Eckstein stressed the need for more federal guidance and recommended legislation to increase the healthcare system readiness including allowing mutual aid with protection from liability. Director Eckstein also stressed the need for improved production methods and facilities for the production of vaccines and antivirals and urged the state to purchase the federally subsidized stock of antivirals for use in the state.

Dale Humburg of the Department of Conservation also testified. As part of the Flyway Council that supports the integrated process for the surveillance of birds, Mr. Humburg reported that there was a strong infrastructure and scientific support for monitoring birds across the state for the possible detection of dangerous viruses.

Testimony taken on November 9, 2006, Jefferson City Missouri

Dr. Gregory Evans of the Institute for Biosecurity, St. Louis University School of Public Health testified against the assertion that the state is adequately prepared to respond to a pandemic outbreak. Dr. Evans was quick to point out that no fault lies with the state departments who work to plan for such disasters. Dr. Evans testified that the structure of the US Public Health System has lead to a state of preparedness paralysis with respect to the ability of all states to truly prepare for a pandemic. Dr. Evans points out that states must create plans and guidelines to receive federal funding to carry out their plans but when the states ask for answers to real questions beyond mere guidance, the federal government either fails to answer or delivers conflicting or confusing information. As a result, Dr. Evans contends, local entities do not truly know how to handle the details of their plans, many organizations have stopped or slowed their planning, and the states are left with a mixed bag of procedures and plans across the localities.

Daniel Landon, the Vice President of Governmental Relations for the Missouri Hospital Association testified to the concern that in the event of a pandemic, there will be a shortage of hospital beds, ventilators or health care practitioners to respond to the expected surge of patients. Mr. Landon further testified that according to the predictions of the CDC, the demand for hospital beds for influenza will quadruple, the demand for ICU beds will exceed available beds by fifty percent, and the demand for ventilators will outstrip supply by three hundred percent.

Mr. Landon testified that the Association supports liability protection for deployed volunteers, statutory changes to provide variances from health care facility licensing standards, and liability protection for hospitals or other provider organizations that arrange for deployment of volunteer practitioners.

IV. COMMITTEE FINDINGS

Since experts believe that a new pandemic may emerge at any time, the state needs to continually check and revise its pandemic preparedness plan.

Based on past occurrences and frequencies of outbreaks experts believe that a pandemic is on the horizon. Experts are concerned that a highly pathenogenic influenza virus that can be spread by migratory birds that has emerged mostly in eastern Asia could evolve into a pandemic. Since this type of outbreak could occur at any time, the state must continually update its preparedness plan in order to protect the health and welfare its citizens in the event of a sudden outbreak.

The state has made significant strides in preparing itself for the possibility of a pandemic. Recently, the Trust for America's Health reported that Missouri met eight out of ten readiness goals that tests the state's ability to respond adequately to a major public health emergency. Only two states rated higher.¹⁹

Even though the Department of Health and Senior Services has made significant attempts to coordinate intergovernmental efforts and educate citizens, guidance for creating pandemic plans may be less than effective.

The Missouri Department of Health and Senior Services sponsors "Ready in 3", an emergency preparedness program that aims to help residents and communities prepare for many types of emergencies from tornadoes to terrorism. They have published a "Community Guide" that aims to educate and prepare all Missourians for a flu pandemic. Educating the public with this program is certainly a step on the right direction, considering recent statements by the US government have made it clear that most, if not all, preparedness and response will be local. The Department is also working with the Homeland Security Advisory Council and have subcommittees on the state and local levels to coordinate pandemic relief. However, the State of Missouri has 114 Local Public Health Agencies, each producing their own version of a preparedness plan based on the information made available to them through the State Department of Health and Senior Services and the CDC. Because this information is non-directive, it may rarely address their specific needs and therefore be less than effective.

The federal government will retain a supporting roll during a pandemic.

It seems clear that the federal government will remain in a "supporting roll" during a pandemic, but any "real direction" is expected on the state and local level. Although local response will be an important part, we need to be prepared on a state level to address some of these issues that are common to all citizens during a pandemic, and have the means to enforce the rules or laws that we agree upon in advance.

Social distancing is a vital strategy in treating a pandemic situation.

In the absence of a vaccine, and with limited supplies of anit-virals, "social distancing" is seen by most experts as a vital strategy in treating a pandemic situation. If it is to be used with any kind of success, this strategy depends upon significant planning, coordination, training and community education. Social distancing cannot be recommended or imposed at the last minute.

¹⁹ Reported in the Kansas City Star, December 13, 2006.

Some of the decisions that need to be made well ahead of any outbreak include: when and if schools should be closed, and for how long; when and if public gatherings should be banned in theaters, malls, and work places; when and if rules regarding how many people can be in a store, elevator, or subway car should be enforced; and how, if at all, will quarantine and isolation be used or enforced. To date, no official federal mandate or even recommendations exist to address these questions.

Decisions have not been made concerning the details involved in distributing drugs and supplies.

Although Missouri has taken advantage of federal matching funds to purchase anti-viral supplies, no decisions have been made as far as when those drugs will be used, who should receive them and under what circumstances. The same applies to face masks or any other tool that may become available for treating a pandemic flu outbreak.

IV. RECOMMENDATIONS

The committee recommends further discussion on legislation that eases the liability for practitioners who are deployed during emergencies in the state.

Because pandemic influenza will not be limited to our own state, we will not be able to look outside of our borders for assistance, as might be the case with an earthquake or other natural disaster. Looking to our own resources, Missouri will need to address concerns about volunteer's potential liability. This will help Missouri recruit licensed physicians, nurses and other practitioners in our state who are either retired or otherwise not working as active practitioners and, therefore, not covered by medical malpractice coverage. Witnesses appearing before the committee, DHSS and the Missouri Hospital Association, concur that legislators need to enact liability protections for practitioners who volunteer to respond to a state-declared emergency. Legislation of this type has been considered in 2005 (House Bill 85), and in 2006 (Senate Bill 889, Senate Bill 820 and House Bill 1118). Under these bills, the civil liability protections would not apply to damages from gross negligence or willful or wanton acts or omissions. In addition to liability protection for individuals, legislators may consider extending liability protection to hospitals or other provider organizations that arrange for or otherwise support the deployment of volunteer practitioners. The concern here is that these support activities may be considered sufficient to draw the hospital into a liability suit as a "deep pocket" defendant while the practitioner himself or herself is protected from liability.

The committee recommends discussion on legislation that eases the liability for providers who may need to deviate from traditional care settings.

In order to deal with the enormous surge of patients a pandemic influenza outbreak would cause, state officials and health care providers may need more flexibility in responding than current law allows. Current law, Section 44.100, RSMo, that authorizes the Governor to grant variances from the state's licensure requirements for physicians, nurses and other health practitioners during a declared state emergency, could be expanded to allow similar types of variances from health care facility licensure standards. For example, state officials might decide that less critically ill patients would be better off being moved to an offsite setting rather than be treated in overcrowded hospital hallways, but without some type of authorization for a variation from the expected standard of care, many facilities would not want to do this because of regulatory and liability concerns.